

IN THE ABSTRACT

Please replace the Abstract with the following replacement
Abstract:

ABSTRACT OF THE DISCLOSURE**SWITCHING POWER CONVERTER AND METHOD OF CONTROLLING OUTPUT VOLTAGE THEREOF USING PREDICTIVE SENSING OF MAGNETIC FLUX**

A switching power converter and method of controlling an output voltage thereof using predictive sensing of magnetic flux provides a low-cost switching power converter via primary-side control using a primary-side winding. An integrator generates a voltage representing magnetic flux within a power magnetic element by integrating a voltage on a primary-side winding of the power magnetic element. A detection circuit detects the end of a half-cycle of post-conduction resonance in the power magnetic element after the energy level in the power magnetic element reaches zero. The voltage of the integrator is stored at the end of the post-conduction resonance half-cycle and is used to determine a sampling point prior to or equal to the start of post-conduction resonance in a subsequent switching cycle of the power converter. The primary-side winding voltage is then sampled at the sampling point, providing an indication of the output voltage of the power converter.